UNIVERSITY OF AUCKLAND

[How do clinicians use assessment data to inform clinical practice when working with older people?]

[HOPE Foundation]

SCHOLARSHIP IMPACT REPORT

23/02/2025

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Thank You and Summary

I would like to express my gratitude to the University of Auckland Faculty of Medical and Health Sciences Summer Research Scholarship for providing this opportunity. I also extend my appreciation to the Hope Foundation for their financial support, which made my participation possible. Furthermore, I would like to acknowledge my supervisors and the research team, including Joanna Hikaka, Ngaire Kerse, Jaimie Wilkie and Katherine Bloomfield, as well as the broader team at the Centre for Co-Created Ageing Research and the interRAI Clinical Use Working Group. Their support and guidance have been invaluable throughout this project.

This study is part of the larger ‘Co-Creating High Utility Data Reports for Home Care (HC) and Aged Residential Care (ARC)’ project, which consists of two phases. My work has focused on the ongoing Phase 1a and 1b components, involving two surveys—one targeting clinicians (sector survey) and the other gathering perspectives from older people, whānau, and caregivers. In this report, I will discuss the interim results of the sector survey based on 66 respondents as of February 4th 2025.

The Summer Research Scholarship has profoundly impacted my personal and professional growth, solidifying my foundation in research while aligning with my long-term aspirations of advocating for vulnerable communities through research. Beyond the technical skills, the opportunity to present and engage with healthcare professionals and researchers has deepened my understanding of how research can drive both clinical practice and system-level change, which I am so excited to see happen as this project furthers.

Input

I was able to complete this project due to generous funding provided by the HOPE Foundation.

Research Activity

To begin, I familiarized myself with the overall project protocols and interRAI's role within both national and global contexts using the background information documents I was provided. I then conducted a small-scale literature review to explore international interRAI research and perspectives/experiences of other forms of comprehensive geriatric assessments (CGAs) from healthcare professionals and older adults' perspectives.

In the survey development phase, I uploaded and structured survey questions on Qualtrics®, developing technical skills in survey design, such as applying logic, survey flow, and question ordering. Through multiple rounds of testing and refinement, I ensured no errors and coherence for participants. Ethical considerations were integrated, including proper consent procedures and compliance with study protocols. I also developed Excel skills to create visual representations, such as stacked bar charts for Likert-scale responses for presentations.

I gained theoretical knowledge of general inductive analysis for qualitative data. Given the limited number of respondents at the time of writing, I conducted a preliminary analysis by linking qualitative insights with quantitative trends. My primary focus has been on integrating both data types in a format that is presentable to both general and academic audiences. Additionally, I researched and gained skills in academic writing. Specifically, I contributed to the development of a draft manuscript for publication and created template tables for use when the survey was concluded.

Finally, I extracted key findings from the sector survey, formulated summaries, designed and presented at the Clinical Working Group meeting, the 5th interRAI Knowledge Exchange and Tōmaiora student presentations. Throughout the 10 weeks, I was also part of the Tōmaiora Summer Research Program (at Te Kupenga Hauora Māori), building connections with fellow summer researchers in the presence of Tōmaiora researchers who inspired us by sharing their research journeys.

Background:

With over 1.2 million assessments completed since its introduction in 2012 (Hikaka et al., 2024), in New Zealand (NZ), a completed interRAI assessment is required to access publicly funded aged residential care (ARC) (De Almeida et al., 2023). InterRAI instruments are supported by a single electronic platform in NZ, which links to other electronic health systems, allowing for information exchange and continuity of care across acute care, home care, long-term care, and palliative care to name a few (De Almeida, 2023; Hikaka, 2024).

Specifically, the use interRAI LTCF (Long-Term Care Facilities) instrument captures a comprehensive array of data across 311 items spanning 19 sections, including key areas such as physical, social, spiritual, and cognitive needs, along with advanced care planning information (Morris et al., 2011). The interRAI system utilises a Minimum Data Set (MDS) that collects comprehensive health information, which is then analysed through Clinical Assessment Protocols (CAPs) and quality indicators (QIs). While CAPs do not automate care planning, they guide clinicians in identifying key health issues and targeted interventions. In contrast, QIs highlight underperforming areas by measuring care quality at the facility level (Iduye et al., 2021). This detailed, holistic assessment, similar to other CGAs, is associated with benefits such as decreased hospital visits, sustained physical function, better overall well-being, less burden on caregivers, and increased contentment with the care provided (Vandenbulcke et al., 2024; Fernanda et al., 2022).

Despite its widespread use, there remains a significant gap in understanding the perceptions of clinicians, persons assessed, caregivers, and families regarding using interRAI data post-assessment. This gap underscores the potential for local insights from New Zealand to inform global discussions on improving the application and engagement with interRAI data.

The available literature on clinicians' perspectives primarily focuses on registered nurse practitioners (RNs) working in ARC facilities and the barriers they face in using interRAI data outputs. The benefits of interRAI data use include continuity of care across various levels in developing care plans and the facilitation of cohesive information exchange between inter- and intra-disciplinary groups and older persons (Sharma, 2020). Clinicians value the comprehensiveness of the data generated by interRAI, which helps identify functional abilities and predisposing risk factors to decline and monitor individual care trajectories as they move throughout the different healthcare settings (De Almeida et al., 2023).

Rationale:

Despite the valuable information and health outcome benefits the tools offer, clinicians face significant barriers in effectively utilising interRAI data. One prominent challenge is the time-consuming nature of interpreting these complex data outputs, which can increase the workload for staff, particularly given its mandatory application (De Almeida et al., 2023; Elliott et al., 2020; Sharma, 2020). RNs have also expressed further challenges in interpreting interRAI data outputs in more complex scenarios, leading to difficulties in developing tailored care plans and communicating these to the persons being assessed and their families (Hermans et al., 2016). Overall, the complexity of the assessment outputs often prevents them from being used to their full potential, further reducing the clinician's perception of the system's value and motivation.

Barriers extend beyond individual clinicians to broader organisational use. At the organisational and policy level, interRAI data is used for resource allocation and benchmarking, enabling comparisons across organisations, sectors, and countries as well as guiding performance monitoring to identify areas for intervention and staff training (Elliott et al., 2020; De Almeida et al., 2023). However, insufficient access to devices with reliable connectivity and poor interoperability with local electronic systems has led to diagnostic discrepancies, data duplication, and delays in care. Therefore, although many clinicians and organisations acknowledge the tool's potential, they emphasise above all, the need for ongoing training, particularly in interpreting the complex data outputs, integrated systems, and automated care plans (Molinari-Ulate et al., 2023; Sharma, 2020; Vuorinen, 2019; De Almeida et al., 2023).

Automated care plans from interRAI data outputs could be achieved by artificial intelligence (AI). By reducing administrative tasks, it could free clinicians to focus on direct care (Badawy & Shaban, 2024). However, AI can introduce challenges, such as the potential for undermining autonomy and reducing the personalisation and human connection of care, and this generalised approach could marginalise certain groups, increasing disparities (Rubeis, 2020; Ho, 2020).

Method:

This study includes two phases: Phase 1a, surveying professionals in the aged care sector, and Phase 1b, surveying older adults and their whānau. The interim results I will present in this report focuses on the perspectives of clinicians.

The surveys were developed based on international research, insights from clinical working groups, and researcher expertise. The Working Group consisted of diverse professionals with expertise in interRAI, clinical care, data analysis, quality improvement, aged care, artificial intelligence and health equity, including Māori health. Their collective knowledge and experience aimed to ensure the surveys effectively address key aspects of care and quality improvement.

Topics discussed include current data access, barriers and use, preferences for customisation and future applications, and perceptions of Artificial Intelligence (AI) in report generation. Questions include demographic queries, multiple-choice options, ranking questions, Likert-scale items, and free-text responses.

Surveys were conducted anonymously using Qualtrics®, a secure web-based platform with access restricted to the research team. Participants were recruited through the working group, researcher networks, and professional organisations, with invitations disseminated via email and social media. Recipients of the invitation were invited to share it with their networks. Participant Information Sheets were attached to the email invites and also available via an electronic link.

By addressing the needs and barriers faced by these stakeholders, this research seeks to be the foundation for later phases, which involve co-developing and drafting information reports that promote collaboration, align with user priorities, and improve the overall effectiveness of interRAI.

This research was approved by the Auckland Health Research Ethics Committee (Ref: 28693).

Research Output(s)

The following section presents interim results from the sector survey, which, as of February 4th, had received responses from 66 participants. These findings were shared at the interRAI Clinical Working Group meeting on February 3rd, 2025, the 5th annual interRAI Knowledge Exchange on February 10th, 2025, and the Tōmaiora Summer Student Presentation at the conclusion of my studentship on February 17th, 2025. Additionally, the results have been incorporated into a draft academic manuscript, and into a poster format report for general audiences.

Demographic characteristics:

The majority of respondents were based in the Auckland and Waitematā areas, with the most common professional roles as nurses and geriatricians, primarily working in secondary care and aged residential care. Experience levels were evenly distributed, with 23 respondents reporting 1–4 years of experience and another 23 having more than 10 years of experience.

Most respondents identified as female (75%), with an average age of 49.78 years. The predominant ethnic group was New Zealand European, followed by Indian, Māori, and Filipino.

Current interRAI Use:

Among respondents, 65% reported using interRAI assessment results, with the most frequent usage in these respondents occurring weekly or daily. The most commonly used interRAI tools were the Long-Term Care Facility assessment, Home Care assessment, and Contact Assessment, primarily for individual assessments and care planning.

A total of 23 respondents reported not having access to interRAI. The barriers they cited included system inaccessibility (either not set up or not user-friendly), a perceived lack of clinical usefulness, delegation to other staff, navigation difficulties, and time constraints. One respondent noted, "*There is nothing I can access from an interRAI that I can't access elsewhere*."

The following sections on interRAI usage are based on the 43 respondents who reported currently using interRAI.

Ease of access to interRAI data:

The majority of respondents reported confidence and ease in accessing interRAI results, with only 21% indicating difficulty in retrieving results on their current computer systems. However, interoperability with other care planning software emerged as a significant concern, with a quarter of respondents either disagreeing or uncertain whether interRAI integrates well with existing systems.

There were mixed opinions on whether interRAI assessment results reduce the time spent on other types of assessments, with 41% agreeing, 32% disagreeing, and 27% unsure. This aligns with qualitative feedback, where some respondents highlighted redundancy in documentation. One participant noted, "*Most reports can be found in the care planning software we use separately. I'd like to see more compatibility between interRAI and the main care planning software used in NZ, as many redundancies come from copying information from one to the other and vice versa*."

Regarding preferred methods of accessing interRAI data, most respondents preferred receiving reports at the individual and facility/organizational level through a dedicated secure portal or integrated within existing systems, such as PMS. Timeliness was also emphasized, with respondents preferring access to reports immediately or within 24 hours.

Understanding and Interpreting interRAI Results:

Almost 70% of respondents reported feeling confident in interpreting assessment results. However, only 46% were familiar with and could interpret the scores and scales generated from interRAI data (e.g., CHESS or MAPLe).

Further, 44% of respondents reported that they found the volume of data generated by interRAI overwhelming, and an additional 41% agreed that time constraints limit their ability to use interRAI assessment results.

Some qualitative responses reinforced these findings, whereas others showed different. One participant noted, "*I find the outcomes helpful as they show the scores I can use in assessment summaries and care planning*." On the other hand, "*I rarely look at the scores. Most useful to me is the continuation notes and demographic data."*

Utility of interRAI Results in Clinical Practice:

Over half of respondents reported confidence in using interRAI assessment results for clinical decision-making. Nearly 60% agreed that interRAI improves clinical care, particularly in informing and prioritizing care needs for individual care planning. However, a degree of uncertainty remained, with 15–30% of respondents selecting ''Unsure'' for each question in this section.

Respondents described varied approaches to using interRAI information in care planning, ranging from obtaining a brief overview of a patient's history to more in-depth applications, such as assessing levels of need, identifying goals, evaluating types of support required, and monitoring trends over time. While many recognized interRAI's value in clinical decision-making, concerns were raised regarding its real-time responsiveness and redundancy with other systems. One respondent noted, "*In aged care, interRAI is not real-time enough to plan daily care or respond to incidents."*

Several respondents identified gaps in the information currently available through interRAI assessments; such as functional and cognitive capacity information. Further, they wished to access included social, legal, and financial information and concerns raised by caregivers, family members, or assessors, such as caregiver stress, medication errors, adherence issues, and the level of support received and available support structures. One participant highlighted the importance of "…*the social aspirations and needs of the client, considering overall health rather than just physical needs*."

Respondents highlighted several key areas regarding the information that should be conveyed to the person assessed and their caregivers/families. Firstly, acknowledging changes from previous assessments and any potential risks, such as those flagged by CAPs, to support informed decision-making. Additionally, they suggested providing a clear and easily understood report summarising assessment findings, tracking changes over time, and identifying signs of improvement or actions needed to prevent decline. As one respondent notes: *"...any potential risks (e.g., CAPS), so I would be better informed to support the individual and help them make choices to prevent flagged concerns*."

Clinicians also noted the value of sharing information about a person's functional and cognitive abilities, which agencies are involved in the person's care and what services are available. *"...what services they may be eligible for. Support available for the family, such as respite care and how it works*."
Finally, there is a need for transparency about how the assessment was conducted, whether by phone or in person, who was present, the options of care discussed and confirmed, and when the next assessment is planned.

Utility at the Organisational and Facility Level:
Responses regarding the utility of the interRAI assessment at the organisational level were varied, reflecting different levels of familiarity with the tool. This variation is likely due to the demographic makeup of our sample, which primarily consists of individuals working in primary or secondary care settings.

Approximately half of the responses indicated uncertainty regarding the utility of interRAI at the organisational level, with participants selecting 'Unsure' for all Likert scale statements. This notion was seen in all participants, including those whose current roles are in an organisational context. Specifically, only 36% found interRAI helpful for prioritising quality improvement initiatives, and 41% found it useful for prioritising care across a facility.

Despite these mixed findings, many respondents acknowledged the potential of interRAI for quality improvement and benchmarking. Free-text responses highlighted a common theme: the need for more targeted and accessible population-level data. One respondent noted, "*Population data for an organisation should be specifically requested for our needs rather than a full data dump*."

Accessibility and User-Friendliness:
Responses from both the Likert scale and free-text questions revealed a strong desire for greater user-friendliness in the assessment results. Notably, 59% of respondents were unsure or felt the tool was not user-friendly enough. Among the 35% of participants who did not currently use interRAI, one respondent explained their reason as "*not accessible with any degree of ease*."

One of the primary concerns highlighted was the time required for Registered Nurses (RNs) to complete the interRAI assessment. As one respondent described, "*The time it takes for RNs to complete the interRAI is a travesty. The data is not used clinically because it is so user-unfriendly*." This sentiment was echoed across several responses, indicating that while the tool holds potential, its usability remains a significant barrier.

There was strong support for providing a more concise, plain-language summary of the assessment results. This was reflected in 88% of respondents agreeing that such a summary was necessary. Additionally, a "plain language clinical summary" was ranked as the most critical type of report needed, and "user-friendly, intuitive reports that are easy to understand" were identified by 36% as the most crucial feature to assist in data usage. One participant noted, "*It needs to be very user-friendly and use intuitive terms—not interRAI jargon, acronyms that someone unfamiliar with interRAI could easily interpret and understand."*

Suggestions for improving the visualisation of results also emerged, with calls for "easy to read results" and including features like "colour coding for good/bad change" to enhance clarity.

Additionally, about one-third of participants preferred the ability to customise reports. Some suggested hiding irrelevant information or expanding on specific details, such as ethnicity selections. As one respondent put, "*More summative, remove all the options that do not apply to the individual, including the scales with descriptors. Have a summary of actions and plan resulting from the assessment*."

Training, Resources, and Support:
Access to support and resources for using the interRAI assessment appears limited, with 23% of respondents reporting access to a dedicated interRAI support team.

Furthermore, 19% frequently assist others in interpreting interRAI data, suggesting inadequate support networks. Additionally, 34% of respondents did not feel they had access to the appropriate resources to use interRAI assessment results effectively.

Training adequacy also showed mixed responses: 49% felt sufficiently trained, while 42% disagreed. This gap highlights a need for improved training initiatives. As one participant suggested, "*The interRAI scales need an explanation for most users—perhaps a back-page explainer, as many clinicians have not had training or exposure.*" This comment reflects a broader concern that many clinicians lack the training or familiarity to engage with the interRAI tool fully.

Use of Artificial Intelligence:

Most respondents, both those currently using interRAI and those who are not, reported that they had not used AI tools in their practice. There was a general sense of scepticism, although few strongly disagreed with using AI. For example, 41% of respondents were unsure about trusting an interRAI summary generated using predictive modelling, with 32% agreeing and 20% disagreeing.

A similar trend emerged regarding trust in AI tools like ChatGPT to generate summaries based on interRAI results. 51% of respondents were unsure, with an almost equal split between those who agreed and those who disagreed. Concerns primarily focused on potential bias, confidentiality issues, and the lack of or conflict with clinical judgment. As one participant expressed, "*Obviously confidentiality, or misunderstanding what has been said and that then going against a health professional's name.*"

Further, some respondents raised concerns about bias in AI, with one remarking, "Bias will remain as it is only as good as the person who programmed it."
Other concerns included the potential for AI to reduce the individualization of care. As one respondent said, "*Misses the nuances of the individual's situation, their preferences. Does not pick up rapid change. Not sure what population/data it would be trained on*."

Additionally, there were environmental concerns, such as the impact of AI on energy consumption: "*Concern over the environmental cost of doing so - the energy required to generate AI reports is a known problem*."

Despite these concerns, free-text responses revealed curiosity about AI's potential to reduce administrative burdens, alleviate time constraints, and improve data interpretation. One participant even saw AI's potential to enhance communication with patients and their families: "…*Take verbal consultations between RNs and residents, staff or family and enter into interRAI programmes… AI can help enhance or automate 'Information for Tangata and whanau*.'"

Many respondents emphasized the importance of real-world validation and proper training before AI tools could be integrated into clinical workflows. As one participant suggested, "*Training such as the type of AI, usability, and management plan (in case of any fault)" is essential. Others recommended, "both in-person and one-on-one training, being able to work with the program in a training mode before using this technology*."

One respondent encapsulated the overall sentiment: "*AI could be helpful, but we need to see real-world applications before we can trust it to inform patient care*."

Research Outcome(s)

Limitations:

Before interpreting the findings, it is important to acknowledge several key limitations. The study was conducted via an online survey (Qualtrics®), which may have contributed to digital exclusion, particularly for clinicians working in rural settings with limited internet access or technological proficiency. The survey was also distributed through researcher networks, limiting the diversity of respondents and potentially biasing the results. Additionally, the study was conducted in English, restricting participation from non-English-speaking clinicians. The voluntary nature of participation also introduces the possibility of self-selection bias, where clinicians with strong views may have been more inclined to respond. These factors should be considered when generalizing the findings. Furthermore, the results discussed are from a limited sample of participants and therefore has not been analysed through advanced frameworks.

Discussion:

The findings from this interim analysis provide insight into current clinician engagement with interRAI assessments, both their perceived utility and the challenges that hinder their optimal use in clinical practice. This discussion critically examines the broader implications of these findings, situating them within the context of prior research, organisational organisational considerations, and potential avenues for future improvement.

Access and Integration Challenges:

Ease of access to interRAI data varied among respondents. While most felt confident retrieving results, a notable proportion also reported difficulty accessing or navigating interRAI assessments through current care-planning systems. Further, there are mixed opinions regarding interRAI’s ability to reduce the time spent on other assessments and recurring frustrations of redundancy in documentation.

This issue of interoperability aligns with findings from many sources, including, but not limited to, Vuorinen (2019) and De Almeida et al. (2023), which emphasised that poor system integration leads to diagnostic discrepancies, data duplication, and inefficiencies in clinical workflows. Other previous research also supports this concern, noting that despite interRAI's intended role in streamlining assessments, many clinicians perceive it as an administrative burden rather than an efficiency-enhancing tool (Sharma, 2020).

Interpretation and application of interRAI Data:

The volume and complexity of data lead to issues with interpretability and, consequently, usability of interRAI assessment results. The need for more summarised, condensed plain language is evident, as many clinicians struggle with information overload. Compounded by this, some clinicians perceive interRAI's lack of providing unique or clinically valuable data, which reduces their motivation and ability to fully leverage its benefits (De Almeida et al., 2023; Vuorinen, 2019). These sentiments are seen in both groups of respondents that currently access/do not currently access interRAI.

The interim results confirm the literature that interRAI outputs are currently perceived as a "data dump," providing vast amounts of information without clear guidance on how to integrate it into practice. The results also revealed that respondents believed interRAI improves clinical care, particularly in prioritising care needs. However, a notable proportion of respondents remained unsure about interRAI's impact on clinical decision-making, even more so in the immediate setting. These findings are consistent with prior research (Sharma, 2020; De Almeida et al., 2023), in which health professionals reported that the assessment process is time-consuming and that the resulting data lacks conciseness, currently making it difficult to apply in real-time decision-making and care planning. This uncertainty reflects broader concerns in the literature about the perceived disconnect between interRAI assessments and practical clinical applications. This echoes the findings of Lafortune et al. (2016) that engagement with assessment outputs depends on how well clinicians understand and trust the system, which suggests that addressing knowledge gaps could enhance interRAI's perceived clinical relevance.

These findings align with previous studies indicating that clinicians often lack sufficient training to utilise it effectively in care planning (Rietkerk et al., 2019; Westgård et al., 2019). Due to the barriers discussed and gaps in training, there were some experiences of participants with the delegation of interRAI responsibilities to specific personnel, which suggests that some organisations have structured workflows that do not prioritise or support direct engagement with interRAI among all clinicians across settings. The need for additional training is further supported by qualitative feedback from respondents who said they rarely use the full summary or scores, instead relying on narrative notes and demographic data.

Organisational Use of interRAI and Implications for Policy:

Despite the mixed responses from participants, there was broad recognition that interRAI data could be valuable for quality improvement initiatives if made more accessible and targeted to specific organisational needs. Furthermore, reflecting on the current sample of respondents, frontline clinicians often feel disconnected from these higher-level applications. A lack of feedback loops between individual assessments and organisational decision-making may be contributing to the perception that interRAI is primarily an administrative requirement rather than a tool that directly benefits patient care from the upstream level. This aligns with findings from Elliott et al. (2020), who emphasise that while interRAI has potential for quality improvement and benchmarking, its utility is hindered by inefficiencies in data dissemination and integration within clinical workflows.

The Role of AI in interRAI Data Interpretation:

While AI tools have shown promise in automating complex data interpretation, their effectiveness in geriatric care remains a contentious issue. While relatively few respondents strongly opposed AI-generated summaries, a prevailing scepticism among respondents regarding AI's role in interRAI. Respondents expressed concerns about depersonalisation, bias, and unpredictability, with critiques that AI systems are only as unbiased as their training data.

This aligns with broader concerns in healthcare regarding AI's ability to account for nuanced, patient-specific contexts and potential conflicts with clinical judgment (Ho, 2020; Rubeis, 2020; Vandenbulcke et al., 2024). Furthermore, concerns echo previous research suggesting that AI-driven systems may inadvertently marginalise specific patient populations by applying overly generalised models (Rubeis, 2020). Additionally, environmental sustainability emerged as an unexpected issue, with some respondents highlighting the energy-intensive nature of AI technologies.

Despite this, there was notable curiosity about AI's ability to reduce documentation burdens and streamline data interpretation. In fact, beyond administrative efficiency, some respondents viewed AI as a tool that could enhance patient and family communication. This aligns with the argument presented by Badawy and Shaban (2024), who suggest that AI could play a role in bridging communication gaps within healthcare settings.

However, successful implementation would require robust real-world validation and clinician training, a point reinforced by respondents who emphasised the need for hands-on education before AI integration.

Conclusion:

Overall, this interim analysis reinforced existing literature on the benefits and challenges of interRAI assessments. The unexpected finding is that while data accessibility was not a significant concern and while most clinicians acknowledge its potential in care planning, barriers related to interoperability, data interpretation and application still hinder its effectiveness and motivation for use. In addition to relieving these barriers, there must be strengthened mechanisms to allow clinicians to see the tangible impact of interRAI assessments on patient care and policy decisions. As more data becomes available, further refinement of these findings will help inform targeted improvements to interRAI's implementation and effectiveness.

(Future) Impact

The long term impact of this project extends beyond immediate improvements in interRAI reporting. By addressing the current barriers in interRAI data utilisation, this research has the potential to contribute to meaningful and sustained changes in healthcare practice, policy and patient outcomes.

Phase 2 of the larger project is directly informed by the findings of this study, and involves the development of interRAI draft reports, which will be piloted in aged care facilities and home care settings. Co-creating these reports with various stakeholders, representing the diverse perspectives explored in this research, will ensure that the data is presented in a way that is relevant, accessible and actionable. Leading to improved clinical practice at both a clinician and organisational scale as well as empowered and informed older persons and their caregivers.

This project will also identify inefficiencies and gaps within the healthcare system, highlighting how interRAI data is currently underutilised and where improvements can be made. Phase 2 also introduces an innovative approach by designing an AI summarization algorithm for interRAI data. By reducing data complexity and streamlining data interpretation, this technology has the potential to revolutionize how aged care information is processed and used.

The strong engagement of respondents in this research from various fields reiterates the level of investment in optimising interRAI reporting, increasing the likelihood of successful implementation. The inclusion of experts in the field, the dedicated working group, ensures that the proposed changes are both practical and aligned with the needs of those using interRAI data. Additionally, interRAI International is supportive of the project, and its findings have the potential to inform practice and policy across the more than 40 countries where interRAI is utilized.

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Appendix:

Table 1. Sociodemographic Characteristics:

Characteristic:		Current interRAI use N = (%)
Age (years)		Average: 49.78; Range: 48–78
Gender:	Female	50 (74.6%)
	Male	17 (25.4%)
Ethnicity	New Zealand European	38 (50.6%)
	Maori	6 (8%)
	Samoan	2 (2.6%)
	Cook Island Maori	0
	Tongan	0
	Niuean	0
	Chinese	4 (5.3%)

	Indian	7 (9.3%)
	Other (please specify):	18 (24%) Malaysian: 2 (2.6%) European: 2 (2.6%) Filipino : 4 (5.3%) British: 2 (2.6%) New Zealander: 2 (2.6%) New Zealander/Irish: 1 (1.3%) Sir Lankan Tamil: 1 (1.3%) African: 1 (1.3%) Fijian : 1 (1.3%) Dutch: 1 (1.3%)
Area they work in:	Northland	3 (3.8%)
	Waitemata	14 (17.9%)
	Auckland	17 (21.8%)
	Counties Manukau	3 (3.8%)
	Waikato	5 (6.4%)
	Bay of Plenty	3 (3.8%)
	Lakes	2 (2.6%)
	Tairawhiti (Gisborne/East Coast)	0
	Hawkes Bay	2 (2.6%)
	Taranaki	1 (1.3%)
	MidCentral (Manawatu)	1 (1.3%)

	Whanganui	0
	Hutt Valley	2 (2.6%)
	Capital and Coast (Wellington Region)	7 (9%)
	Nelson-Marlborough	1 (1.3%)
	Canterbury	4 (5.1%)
	South Canterbury	7 (9%)
	Southern	4 (5.1%)
	West Coast	0
	National Role	2 (2.6%)
Type of organisation:	Primary Care Organisation	7 (8.8%)
	Secondary Care Practice	32 (40.0%)
	Aged Residential Care Facility	17 (21.3%)
	Home-Based Support Services Provider	8 (10.0%)
	Non-Governmental Organisation or Charitable Trust	4 (5.0%)
	Government Agency	4 (5.0%)
	Educational Institution	2 (2.5%)
	Other (please specify):	3 (3.8%)
	Primary Role:	Geriatrician: 20 (25.0%) Nurse: 18 (22.5%) Occupational/Physiotherapist: 3 (3.8%) Other Roles: 39 (48.8%) *(Total: 80)*

Years in current role	<1 year	3 (4.5%)
	1-4 years	23 (34.3%)
	5-10 years	18 (26.9%)
	10+ years	23 (34.3%)
Have you used an Artifical Intelligence (AI) tool similar to ChatGPT in your practice?	Yes	16 (23.8%)
	No	48 (71.6%)
	Unsure	3 (4.4%)

Table 2. Current interRAI use:

		Respondents (n) %
Frequency	Daily	10 (23.3%)
	Weekly	19 (44.2%)
	Monthly	5 (11.6%)
	Less than Monthly	9 (20.9%)9 (20.9%)
Tool use	Home Care	20 (24.4%)
	Palliative Care	6 (7.3%)
	Long term care facility	25 (30.5%)
	Contact Assessment	17 (20.7%)
	Acute Care	8 (9.8%)
	Community health	6 (7.3%)

	Unsure/Not applicable	0
Purpose of current use of results	Assessments of individuals	34 (42.5%)
	Care planning for individuals	31 (38.8%)
	Quality improvement	8 (10.0%)
	Clinical benchmarking	5 (6.3%)
	Other (please specify):	2 (2.5%)
Dedicated interRAI admin support team	Yes (available)	10 (23.3%)
	Not	21 (48.8%)
	Unsure	12 (27.9%)

Table 3. Likert Scale responses:

Statements (n=)	Strongly Agree	Agree	Disagree	Strongly Disagree	Unsure
Access to interRAI data					
I am confident in accessing interRAI assessment results (n=43)	10 (23%)	23 (53%)	4 (9%)	3 (7%)	3 (7%)
I find it easy to access interRAI assessment results. (n=43)	9 (21%)	21 (49%)	6 (14%)	5 (12%)	2 (5%)
It is difficult to access interRAI assessment results on the computer system I currently use. (n=41)	2 (5%)	7 (16%)	19 (44%)	12 (28%)	3 (7%)
interRAI assessment results and platforms integrate well with other computer systems and programmes that I use. (n=41)	2 (5%)	8 (20%)	8 (20%)	9 (22%)	14 (34%)
Understanding and Interpreting interRAI Results					

I don't use interRAI assessment results enough to be confident using it. (n=41)	1 (2%)	14 (34%)	17 (41%)	7 (17%)	2 (5%)
I know how to interpret the assessment results that are generated from interRAI assessments. (n=41)	5 (12%)	14 (34%)	12 (29%)	3 (7%)	7 (17%)
I know how to interpret the scores and scales that are generated from interRAI data (for example, the CHESS or MAPLe score). (n=41)	4 (10%)	24 (59%)	8 (20%)	0 (0%)	5 (12%)
The volume of data generated by interRAI is overwhelming. (n=41)	3 (7%)	15 (37%)	14 (34%)	1 (2%)	8 (20%)
Time constraints limit my ability to use interRAI assessment results. (n=41)	3 (7%)	14 (34%)	14 (34%)	2 (5%)	8 (20%)
Utility of interRAI Results in Clinical Practice					
I am confident using interRAI assessment results to inform clinical practice and decision-making. (n=41)	11 (27%)	12 (29%)	9 (22%)	0 (0%)	9 (22%)
The assessment results/reports generated from interRAI data are useful in informing what care is needed for an individual. (n=41)	11 (27%)	12 (29%)	6 (15%)	2 (5%)	10 (24%)
The assessment results/reports generated from interRAI data are useful for prioritising care for an individual. (n=41)	9 (22%)	18 (44%)	7 (17%)	1 (2%)	6 (15%)
Being able to use interRAI assessment results improves clinical care. (n=41)	9 (22%)	15 (37%)	8 (20%)	1 (2%)	8 (20%)
Using interRAI assessment results reduces the time I need to spend conducting other types of assessments. (n=41)	5 (12%)	12 (29%)	8 (20%)	5 (12%)	11 (27%)
Organisational and Facility-Level Impact					

The reports generated from interRAI data are useful for prioritising quality improvement initiatives across a facility or organisation. (n=41)	3 (7%)	12 (29%)	5 (12%)	2 (5%)	19 (46%)
The reports generated from interRAI data are useful for prioritising care across a facility or organisation. (n=41)	3 (7%)	14 (34%)	4 (10%)	2 (5%)	18 (44%)
Accessibility and User-Friendliness					
A simple summary of the interRAI assessment in plain language would be useful. (n=41)	15 (37%)	21 (51%)	2 (5%)	0 (0%)	3 (7%)
I would like the ability to customise or build my own interRAI reports. (n=41)	5 (12%)	9 (22%)	9 (22%)	4 (10%)	14 (34%)
The reports generated from interRAI assessment results are user-friendly. (n=41)	4 (10%)	14 (34%)	11 (27%)	3 (7%)	9 (22%)
Training, Resources, and Support					
I know who to ask if I have issues with accessing interRAI assessment results. (n=43)	10 (23%)	14 (33%)	9 (21%)	4 (9%)	6 (14%)
I have had adequate training to be able to use interRAI assessment results in the way I find useful. (n=41)	6 (15%)	14 (34%)	15 (37%)	2 (5%)	4 (10%)
I have access to appropriate resources to support me to use interRAI assessment results effectively. (n=41)	6 (15%)	15 (37%)	13 (32%)	1 (2%)	6 (15%)
I spend a lot of time helping others interpret interRAI assessment results. (n=41)	1 (2%)	7 (17%)	19 (46%)	8 (20%)	6 (15%)
Use of Artificial Intelligence (AI)					
I would trust an interRAI summary generated using predictive modelling. (n=41)	3 (7%)	13 (32%)	8 (20%)	0	17 (41%)

I would trust an interRAI summary generated from an AI tool similar to ChatGPT. (n=41)	2 (5%)	9 (22%)	8 (20%)	1 (2%)	21 (51%)

Table 4. Ranking-style responses:

Aspect	1st Rank (%)	2nd Rank (%)	3rd Rank (%)	4th Rank (%)	5th Rank (%)	6th Rank (%)	Mean Rank
Important aspects of interRAI reports to assist in using the information							
Develop standardised reporting to ensure consistency/comparability across facilities. (n=41)	12 (33.3%)	6 (16.7%)	5 (13.9%)	8 (22.2%)	4 (11.1%)	1 (2.8%)	2.69
Ability to easily generate relevant report. (n=41)	5 (13.9%)	12 (33.3%)	6 (16.7%)	9 (25.0%)	4 (11.1%)	0 (0.0%)	3.08
User - friendly, intuitive reports that are easy to understand. (n=41)	13 (36.1%)	4 (11.1%)	12 (33.3%)	2 (5.6%)	2 (5.6%)	3 (8.3%)	2.44
Ability to benchmark across regions/facilities. (n=41)	3 (8.3%)	5 (13.9%)	2 (5.6%)	7 (19.4%)	6 (16.7%)	13 (36.1%)	4.53
Provide ongoing training/support to effectively use and interpret reports. (n=41)	1 (2.8%)	4 (11.1%)	3 (8.3%)	4 (11.1%)	15 (41.7%)	9 (25.0%)	4.67
Promote collaboration in a multidisciplinary team. (n=41)	2 (5.6%)	5 (13.9%)	8 (22.2%)	6 (16.7%)	5 (13.9%)	10 (27.8%)	4.39
Important needs for the type of report generated from interRAI assessments							
Plain language clinical summary. (n=41)	16 (47.1%)	5 (14.7%)	2 (5.9%)	1 (2.9%)	5 (14.7%)	5 (14.7%)	2.68
Summaries of functional ability and activity. (n=41)	10 (29.4%)	9 (26.5%)	8 (23.5%)	4 (11.8%)	3 (8.8%)	0 (0.0%)	2.62

Identify early deterioration indicators. (n=41)	2 (5.9%)	9 (26.5%)	8 (23.5%)	5 (14.7%)	6 (17.6%)	4 (11.8%)	3.79
Outcome measures that are directly relevant to patient care. (n=41)	3 (8.8%)	4 (11.8%)	11 (32.4%)	11 (32.4%)	5 (14.7%)	0 (0.0%)	3.44
Use of specific reports: eg carer stress/oral health report/medication/falls. (n=41)	0 (0.0%)	4 (11.8%)	2 (5.9%)	9 (26.5%)	9 (26.5%)	10 (29.4%)	4.85
Recommendations for clinical practice improvements. (n=41)	3 (8.8%)	3 (8.8%)	3 (8.8%)	4 (11.8%)	6 (17.6%)	15 (44.1%)	4.82